Mission Bay Landfill
Technical Advisory Committee
City Administration Building
12th Floor Conference Room B
February 18, 2005
10:00 to 12:00

Meeting Minutes

TAC Members Present

Donna Frye	Rebecca Lafreniere	Dave Huntley Ph.D.
Robert Curtis	Barry Pulver	Ben Leaf
Jeoffry Gordon	Judy Swink	Brain McDaniel
David Kennedy, DDS		

TAC Members Absent

Bruce Reznik	Robert Tukey Ph.D.	Frank Gormlie
John Wilks		

Interested Parties/Alternates

Scott Andrews	Jace Miller	Samir Mahmalji
Kathleen Blavatt	George Murphy	Tessa McRae
Hiram Sarabia	David Koontz	Jeff Green
Susan Orlofsky		

Staff

Steven Fontana	Ray Purtee	Vicky Gallagher

The meeting was called to order by Councilmember Frye. Self introductions were made. A quorum was present.

Approval of Minutes

The January meeting minutes were reviewed and approved with the following changes:

page 2, second paragraph, change last two sentences to read: "So these two drive points were moved to the river side of the landfill and driven into the river bottom mud- one near the western end of the landfill and one near the eastern end. Water levels within the drive point rods appeared to confirm groundwater flow from the River to the Bay."
Page 4, fourth paragraph, add after first sentence "Concerns were raised that the Shaw/EMCON monitoring firm tests to no standards. There are no standards in the water board permit that the City tests to."

page 4, Water Fluoridation Chemicals, add after first sentence " He discussed the use of hydrofluosilicic acid(HFSA) as a fluoridating agent and the mechanism that fluoride is thought to reduce tooth decay. Since fluoride only works topically at high levels it is not possible to show any benefit from ingested fluoride. Since the contaminants in HFSA exceed the public health goals(PHG) it is probable that its use causes harm."
page 5, Public Comment, change the first sentence to read "Concerns were raised that there were a lot of reports in Ocean Beach that swimming in the ocean can lead to staph infections and/or catching viruses."
Page 5, Public Comment, add at beginning of second paragraph "The health effects of thallium exposure were discussed. While the carcinogenic effects are not known, there may be neurological effects."

Risk Assessment

Dr. Damian of SCS Engineers gave a PowerPoint presentation on the Mission Bay landfill site's human health risk assessment process. Since the PowerPoint slides will be made available to the group, these minutes will concentrate on the questions asked and the responses made during the presentation:

Q. What percentage of the health risk assessment has been completed? A. About 70%
Q. Will historical data be incorporated? A.Yes.

Q. How often do contaminants show up in the blanks? Why can't contaminants be kept out of them? A. It's really difficult to get all solvents off of glassware in the lab, so blanks are run thru the system to identify and quantify their levels.
Q. What is a "trip blank?" and an "equipment blank?" A. They go through the same procedures and processes as the samples; then are analyzed as the samples are.
Q. How does the presence of contaminants in the lab ware affect evaluation of the site's results?
A. If detected in the blanks as a lab contaminant, then it would be deleted from the site's results. SCS will state in the report what contaminants were deleted from the program in this way.

Q. From the new wells, how many rounds of samples were collected? A. One
Q. Multiple rounds would confirm whether it's a lab contaminant or actually present. What is meant by "deletion of a contaminant from the program?" A. It's not considered a COPC for the media tested.
Q. You would not retest? A. Only if contaminants exceeded QA/QC limits.
Q. The report should be clear and transparent where blanks show contaminants which are then deleted. Does taking multiple rounds aide accuracy? A. Yes
Q. How many COPC's have been removed and do you recommend a second sampling?
A. Contaminants that have been removed include Acetone, Butanone, Methyl Ethyl Ketone, and Methylene Chloride. As these are common laboratory contaminants a second sampling is not recommended. Also the cost to get repeat samples must be considered.
Q. Do you have the EPA list of priority pollutants because it includes Acetone? A. Haven't reviewed it yet, but will.

Q. Can you allow for a threshold effect on carcinogenic materials? A. There are no threshold effect (zero) levels for carcinogens.
Q. One of the goals of the study is to determine where the landfill ends? A.[Tessa McRae] Western borings did determine that it ended in the Sea World parking lot.
Q. There should be someone getting a daily exposure [to the landfill] of six to eight hours?

A. O.K. then a Sea World worker will be added as an exposure population.
Q. A hotel was proposed before but exposure prevented it; any study should encompass a hotel and be all inclusive of possible future uses. If we're not going to include a hotel in the analysis, then explicitly state in the report that this is not addressed by the report. A.[Judy Swink] Based on her participation in the Mission Bay (MB) Park master plan, no hotel will be built on the site, but a conference building for Sea World is proposed near the shore line and a MB Boat and Ski Clubhouse near the boat ramp. Also, near the landfill, an open air amphitheater is proposed.
Q. Will [the HRA] model include pregnant women? A. Yes, they are included under "sensitive populations."
Q. Different receptor populations really seem to translate to hours of exposure don't they? For example a transient versus a recreational user? A. Yes, in this sense .

Q. If hexavalent chromium is in the water then how do you calculate the risk to jet skiers breathing water mist contaminated with it? Since City doesn't post the bay for toxic contaminants, this should be included in the risk assessment. A. How do we estimate how much hexavalent chromium is due to the landfill and from other sources? It would be costly to model and calculate the landfill's contribution to the bay waters.
Q. Since we know the rate at which the bay flushes out sewer spills and can estimate the flux of contaminants from the landfill, then why not estimate loading of the bay by the landfill? We could have experts on bay modeling get their info to SCS. A. There would be huge uncertainties in the modeling and the exposure levels would still be negligibly small due to dilution of landfill contaminants by the bay.
Q. Why not do a risk assessment regardless of source, landfill or otherwise? A. The focus of this risk assessment is on risk attributed to the landfill.
Q. We need to look at a worst case scenario such as a swimmer swimming a marathon.
A. A worst case model could be a swimmer swimming in the landfill's groundwater.
Q. How about a worst case scenario being a child, under 12, swimming in the groundwater?

Councilmember Frye: "Until we nail down the basic assumptions the risk assessment will be delayed. Is there a motion on the assumptions to be used?"
A motion was made, seconded and approved that the receptor populations be the following:

1. A recreational user
2. An employee on site with a 40hr work week
3. A child under 12 swimming in the groundwater
4. A transient camping on the landfill

A second motion was made, seconded and approved to attempt to have a third party, Ann de Peyster, review the criteria of the risk assessment and comment on it with the intent to not slow it down. If Ann should want a change in the receptor populations this must come back to the committee first. Hiram Sarabia will follow up on contact with Ann.

A motion was made, seconded and approved that the exposure pathways would be

1. Soil inhalation
2. Soil ingestion
3. Dermal contact with soil
4. Inhalation of indoor/outdoor air
5. Ingestion by a swimmer of water

Q. Exposure to multiple contaminants simultaneously has effects that are not represented by linearly adding together exposures when creating a "Hazard Index", e.g. HQ1 + HQ2 + HQ3 = HI?
A. Linearly adding them is the standard approach by the USEPA. OEHHA says that synergistic information must be used in developing a Public Health Goal, but this is a different method than we are using.

Q. Can No Harmful Effect Levels be listed in the report?
After discussion, a motion was made, seconded and approved to have a quality assurance/quality control section in the monitoring and risk assessment report that details how reliable the data used is to the work being presented.

Q. How will the precautionary principle be applied in this risk assessment? A. There is no standard method and I have never seen it in a risk assessment- there is no template to incorporate it. A standard risk assessment tells what level minimizes risk. If we could summarize the precautionary principle in a similar way then we could apply it to the risk assessment. For example, "If there are contaminant levels, then they should be minimized."

Councilmember Frye asked that those in the group with medical expertise participate in a subcommittee to identify what we want the precautionary principle to flesh out in the risk assessment. This should be done by the next TAC meeting, March 18th, so that this could be the other agenda item with the ecological risk assessment. Then in April, water quality standards could be an agenda item.

Steve Fontana apologized for computer glitches that have caused problems with the City's email system. If anyone finds that they have stopped getting minutes, agendas, and emails they should recheck the sign in sheet to make certain their address is current.

Items for next agenda

• Ecological Risk Assessment by Dr. Damian of SCS
• How to apply Precautionary Principle to Health Risk Assessment

Future Meetings

City Administration Building, 12th Floor Conference Room B, 10:00am – 12:00pm

- Friday, March 18, 2005
- Friday, April 15, 2005
- Friday, May 20, 2005